

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 16, line 1 (original paragraph [0055]), with the following rewritten paragraph:

[0055] In the mode of the present invention discussed above, the ink cartridge 10 detects the state of ink in the chamber 16 (for example, the presence or the absence of ink) under the condition externally specified by the control device 22 of the printer 20 outside the ink cartridge 10. This arrangement does not set any fixed condition for the detection and thus flexibly handles the change in state. For example, the procedure flexibly handles a change in optimum detection condition due to a variation in composition of the ink held in the chamber 16. Data transmission between the ink cartridge 10 and the printer 20 is carried out by radio communication. There is accordingly no ~~fair~~fear of any failed contact between the printer 20 and the ink cartridge 10 traveling in the course of printing. This structure thus ensures stable data transmission. In the structure of this mode, the ink cartridge 10 outputs the data relating to the externally specified detection condition together with the detection result. The controller 22 of the printer 20, which has specified the detection condition, verifies the detection result. This arrangement thus ensures the sufficiently high reliability of the detection as well as the data communication.

Please replace the current abstract with the following rewritten abstract:

An ink cartridge ~~10 of the invention~~ has a sensor ~~17~~ to detect ~~the presence or the absence of ink~~. A printer's control device 22 of a printer 20 transmits a detection command and a specified detection condition to the ink cartridge ~~10~~ by radio communication. In response to

input of the detection command into the ink cartridge-10, a sensor controller 19-actuates and vibrates the sensor 17-under the specified detection condition. The sensor 17-is attached to a resonance chamber-18, ~~which is~~ disposed in an ink chamber-16. The frequency of ~~the~~ vibration of the sensor 17-is ~~thus~~ regulated by a resonance frequency of the resonance chamber-18. The resonance frequency is varied by ~~the presence or the absence of~~ ink in the resonance chamber-18. Detection of the resonance frequency accordingly specifies ~~the presence or the absence of~~ if ink is in the resonance chamber 18-and ~~thereby~~ the remaining quantity of ink in the ink cartridge-10. The printer's control device 22 ~~of the printer 20~~ receives the detection result ~~of the detection~~ together with the detection condition from the ink cartridge-10, and checks ~~whether or not the~~ if detection ~~has been~~ was carried out under the specified detection condition, ~~in order to verify the~~ validity ~~of~~ validate the detection result. ~~This technique of the invention is generally applicable to a cartridge that holds a recording material used for printing therein, for example, an ink or a toner, and detects the state of the recording material. The arrangement flexibly handles the change in detection condition and ensures the sufficiently high reliability of the detection.~~